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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,784	08/01/2003	Peter Minko	FA1026USNA	3650
23906	7590	08/25/2005	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			HOGAN, JAMES SEAN	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,784	Applicant(s) MINKO, PETER	
	Examiner James S. Hogan	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 2, 3 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/01/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the high-speed rotary coating device" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4 and 6,8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,887,770 to Wacker et al., in view of U.S Patent No. 6,352,589 to Furuoya and further in view of Dr. Thomas Brock, European Coatings Handbook, Curt R. Vincentz Verlag, Hannover 2000, page 295, lines 27-28

Regarding claim 1, Wacker et al. ('770) teaches an electrode ring (216, 218, 220) suitable for providing electrostatic assistance to a high-speed rotary coating device having a high-speed rotary bell (102) for the application of spray coatings and having electrode fingers (again, 216, 218, and 220) connected to the housing and having electrode tips (not numbered). Wacker et al. ('770) does not the electrode ring being constructed so as to be capable of performing rotational movements about the axis of

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rotation of the rotary bell directed through the center of the circle of the electrode ring.

Furuoya ('589) teaches an apparatus having a ring of rotating electrodes for the purpose of coating material onto semi-conductor substrates. Rotating electrode fingers of this nature are considered to be taught by this art and by the inclusive Non Patent Literature included with the application Dr. Thomas Brock, European Coatings Handbook, Curt R. Vincentz Verlag, Hannover 2000, page 295, line 27-28 with regards to creating a charge large enough for corona charging.. As per claim 4, the electrode ring comprises sliding contact (216) for the purpose of electrical contacting of the electrode tips. As per claims 8, the Brock reference teaches the use of electrostatic coating to automotive parts, which are wide regarded as mass produced goods. As for claim 9, the substrates sprayed electostatically by the claimed device or any other similar device would have not patentably distinct differences would not have been obvious to one skilled in the art at the time the invention was made. Further, it would have been obvious to one skilled in the art at the time the invention was made to have modified the spray gun of Wacker ('770) with the rotating electrodes of Furuoya with the specific idea of creating corona charging as taught by Brock in order to increase the charge for the necessary throughput for the coating of various substrates.

Allowable Subject Matter

Claim 5 is allowed.

Claims 2 ,3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

U.S. Patent No. 6,672,521 to Reichler, disclosing a rotary atomizer

U.S. Patent No. 6,439,485 to Börner, disclosing a rotary atomizer

U.S. Patent No. 6,896,735 to Giuliano et al, disclosing an integrated electrode ring

U.S. Patent Application No. 20020096582 to Edelhauser, disclosing a coating apparatus

U.S. Patent Application No. 20030001031 to Heldt et al., disclosing a paint atomizer bell with ionization ring

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSH
08/17/2005



David A. Scherbel
Supervisory Patent Examiner
Group 3700